

REMARKS

This application has been carefully reviewed in light of the Office Action dated September 19, 2005. Claims 17, 19, 20, 21, 23 and 24 remain in the application. Claims 18 and 22 have been canceled and Claims 17, 19, 20, 21, 23 and 24 have been amended. Claims 17 and 21 are the independent claims. Reconsideration and further examination are respectfully requested.

Claims 17 to 24 were rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,483,656 (Oprescu). Reconsideration and withdrawal of these rejections are respectfully requested.

The present invention generally concerns management of power consumption for circuit blocks controlled by a controller. Among its many features, the present invention includes generating a first interrupt signal so that a new circuit block cannot be activated in a case where the amount of power consumption exceeds a first limit value, and generating a second interrupt signal to shut down the controller in a case where the amount of power consumption exceeds a second limit value.

Referring specifically to claim language, independent Claim 17 as amended is directed to a power manager for controlling power consumption of a plurality of circuit blocks controlled by a controller. The manager includes a status monitor arranged to monitor the operating status of each circuit block, an adder arranged to calculate the amount of power consumption consumed by each circuit block in the operating state, a comparator arranged to compare the amount of power consumption with a first limit value and a second limit value bigger than the first limit value, and a generator arranged to generate a first interrupt signal so that a new circuit block cannot be activated in a case

where the amount of power consumption exceeds the first limit value, and arranged to generate a second interrupt signal to shut down the controller in a case where the amount of power consumption exceeds the second limit value.

Independent Claim 21 as amended is directed to a power managing method for controlling power consumption of a plurality of circuit blocks controlled by a controller. The method includes monitoring the operating status of each circuit block, calculating the amount of power consumption by each circuit block in the operating state, comparing the amount of power consumption with a first limit value and a second limit value bigger than the first limit value, generating a first interrupt signal so that a new circuit block cannot be activated in a case where the amount of power consumption exceeds the first limit value, and generating a second interrupt signal to shut down the controller in a case where the amount of power consumption exceeds the second limit value.

In contrast, Applicants submit that Oprescu is not seen to suggest or disclose at least the feature of generating a first interrupt signal so that a new circuit block cannot be activated in a case where the amount of power consumption exceeds a first limit value, and generating a second interrupt signal to shut down the controller in a case where the amount of power consumption exceeds a second limit value.

As understood by Applicants, Oprescu discloses a power management system which tracks the total amount of power drawn from a bus by devices connected to the bus and to the bus itself, based on the individual operation status of each device. The system determines whether a surplus exists sufficient to allow an additional device to operate, or allow a currently operating device to draw more power. The system is capable

of sequencing the use of several devices to allow them to operate while maintaining the total power draw within an acceptable range. See Oprescu, Abstract.

Pages 2 and 3 of the Office Action assert that Oprescu (Figure 2 and Column 8, line 14 to Column 9, line 26) discloses notification means for comparing summed power with a predetermined threshold value and, if the summed power exceeds the threshold value, so notifying the controller. Page 3 of the Office Action additionally asserts that Oprescu (Figure 2 and Column 2, lines 20 to 67) discloses notification means for a plurality of mutually different values as threshold values and performing notification in dependence upon results of comparison with each of the threshold values.

However, Oprescu is not seen to disclose or suggest generating a first interrupt signal so that a new circuit block cannot be activated in a case where the amount of power consumption exceeds a first limit value, and generating a second interrupt signal to shut down the controller in a case where the amount of power consumption exceeds a second limit value.

In particular, the portions of Oprescu cited by the Office Action disclose that the manager makes decisions on whether to grant power usage requests based on the outstanding available power and the amount of power being used by other devices, as well as the priority of the requesting device. See Oprescu, Column 8, line 14 to Column 9, line 26 and Column 2, lines 20 to 67. However, Oprescu does not mention the generation of an interrupt signal at all, much less the generation of an interrupt signal based on comparison with limit values. Further, Oprescu is not seen to disclose or suggest that a first interrupt signal is arranged so that a new circuit block cannot be activated when power exceeds a first value, or that a second interrupt signal is arranged so that the controller or

power manager is shut down when power consumption exceeds a second limit value. In fact, Oprescu is seen to disclose precisely the opposite, i.e. that the requesting device will be activated, because the system of Oprescu simply defers the currently pending power usage request from the requesting device if sufficient power is unavailable. See Oprescu, Column 9, lines 9 to 11.

In view of the foregoing remarks, Oprescu is not understood to disclose or suggest at least the feature of generating a first interrupt signal so that a new circuit block cannot be activated in a case where the amount of power consumption exceeds a first limit value, and generating a second interrupt signal to shut down the controller in a case where the amount of power consumption exceeds a second limit value.

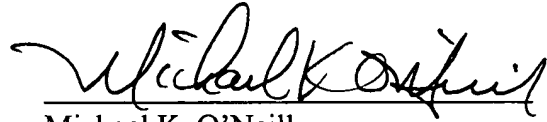
Accordingly, independent Claims 17 and 21 are believed to be allowable over the applied references. Reconsideration and withdrawal of the § 102(b) rejection of Claims 17 and 21 are therefore respectfully requested.

The remaining claims are dependent from the independent claims discussed above and are therefore believed to be allowable over the applied references for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, the entire application is believed to be in condition for allowance and such action is respectfully requested at the Examiner's earliest convenience.

Applicants' undersigned attorney may be reached in our Costa Mesa, CA office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael K. O'Neill", written over a horizontal line.

Michael K. O'Neill
Attorney for Applicants
Registration No. 32,622

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-2200
Facsimile: (212) 218-2200

CA_MAIN 106445v1